

Clinical Cases.

VASO-MOTOR AND TROPHIC SYMPTOMS OF CENTRAL NERVOUS ORIGIN.

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Katie S., aged twelve, of healthy parents and good family history, was sent to my clinique by Dr. F. Hartley, January 15, 1885. She had general convulsions occasionally as an infant, but has had none since she was four years old. These convulsions were never followed by paralysis. At the age of four she had whooping-cough; at the age of seven, diphtheria; at the age of nine, measles, and in January, 1884, a severe attack of dysentery, from which she recovered slowly. After her recovery, in the month of March, 1884, she took somewhat violent exercise in a gymnasium to which she was in the habit of going, and on one occasion jumped from a height, jarring herself slightly. It is to this jar that the family ascribe her disease. In June, 1884, she noticed a slight ulceration about the nail of the right thumb, such as might have been caused by a "hangnail." This, instead of healing, extended around the root of the nail on one side, and under the nail, and in a few days similar ulcerations appeared about the nails of the fingers, and also on the fingers of the left hand. There was noticed a considerable degree of venous congestion of the tips of the fingers at this time, together with some swelling of the entire terminal phalanges. After a time the ulceration extended over the tip of the fingers to the palmar surface. During the continuance of the local affection in the hands the skin of the entire body became dry and rough, and her mother noticed that wherever any pressure was made on any part for a time a superficial ulceration occurred which soon scabbed over and gradually healed. For a time during September, 1884, the toes had been ulcerated in a similar manner to the fingers, but these had gradually healed, leaving the feet, however, quite tender, so that she disliked to walk. For the past six months the girl had

been losing flesh and strength, and the eyebrows, eyelashes, and, to some extent, the hair of the scalp had fallen out.

On examination she was found to be pale, anæmic, and poorly nourished, with little fat and flabby muscles. The absence of eyebrows and eyelashes gave the face a peculiar appearance, but its skin was normal. On the tips of several fingers of both hands, and on the thumbs, small ulcers were found of irregular shape, some involving the nail, others on the pulp of the finger. On one finger a small collection of pus beneath the epidermis was ready to rupture. Cicatrices on several of the fingers near the ulcers showed where similar processes had run their course. The ulceration was very superficial, involving the epidermis and upper layers of the corium only, and nowhere going down to the tendons or bone. Both hands were mottled, reddish or purplish in color, the congestion being more marked on the fingers, all phalanges being about equally involved. The fingers were swollen, hard, œdematous, irregularly congested, the mottling being deeper at certain spots. No gangrenous spots were seen, nor could it be ascertained that any had been present. The nails had not ceased to grow, and were not ridged or curved. She suffered some pain in the ulcers, and was prevented by it from using her hands. The feet were congested and mottled, but no ulcerations were found upon them. Both hands and feet were warmer than the rest of the body, and she complained of subjective sensations of heat. Sensation to touch, temperature, and pain were unaffected, the muscular sense was good, the muscles could all be put in action, their electric reactions were normal, and the grasp of the hands was as good as could be expected when the pain produced by pressure on the ulcers was considered. Over the elbows and external malleoli of the ankles dry scabs were found where ulcerations of some extent were healing. Similar crusts were present on two places over the vertebræ. The skin everywhere was dry, rough, and scaly, there being, however, no true eczema or psoriasis. Sensation and motion were nowhere impaired. She suffered slightly from headache, and her appetite was poor. The chief complaint was of the local condition. Physical examination showed heart, lungs, liver, and spleen of normal size, and furnished no evidence of disease in these organs. The urine was passed regularly in sufficient amount, sp. gr. 1021, yellow, no alb., no casts, no sugar.

The symmetrical location of the ulcerations on both hands and both feet, and the evidence from the appearance of the extremities, of vaso-motor and trophic disturbances, unaccompanied by sensory or motor symptoms, were thought to indicate a central lesion in the spinal cord. In the absence of paralysis with atrophy, and in the absence of disturbances of pain and temperature-senses, either directly or in their rate of transmission, it was impossible to consider the anterior or posterior gray horns affected. No symptoms pointed to the implication of any of the tracts surrounding the gray matter of the cord. If the disease lay in the

cord, it must have affected the central gray matter surrounding the canal. Peripheral neuritis was not possible in the absence of sensory and motor symptoms, and of tenderness along the nerves.

The occurrence of symptoms of vaso-motor and trophic character in cases of syringo-myelia, suggested the possibility of this location of the lesion, but the condition was not sufficiently serious to warrant the conclusion that an actual disintegration of tissue had occurred, and hence the case could not be called one of central myelitis.

It did not present the history of symmetrical gangrene, or Raynaud's disease.

The absence of any local cause for the symptoms, and the fact that the anæmic condition had developed in spite of good hygienic surroundings, rather supported the diagnosis.

She remained under observation for four months, during which time her general condition improved somewhat under tonic treatment with iron, arsenic, and cod-liver oil. Local applications did not seem to stimulate the ulcers to heal. Electricity was applied in several ways. Galvanic currents were applied to the spinal cord, to the peripheral nerves, and, finally, through a bath, the anode being placed on the neck, and the cathode in a basin of water, in which the hands were held. None of these methods seemed to produce any appreciable effect. Faradism was so painful that it could not be borne, and was not thoroughly applied. The local condition not improving after continued electrical treatment, she ceased to attend.

The case is reported as being a rare condition of vaso-motor and trophic disturbance. The only case which I can find at all resembling it, is one reported by C. K. Mills, in the *Amer. Jour. of Med. Science*, 1878, Oct.